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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,395	11/20/2003	Craig A. Bianchini	CIN-100US1	9752
23122	7590	01/24/2005	EXAMINER	
RATNERPRESTIA			ALVO, MARC S	
P O BOX 980			ART UNIT	
VALLEY FORGE, PA 19482-0980			PAPER NUMBER	

1731

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,395	BIANCHINI	
	Examiner	Art Unit	
	Steve Alvo	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 23, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over SAMUELSON (3,853,473) in view of THORSELL (4,670,098).

SAMUELSON teaches improving wood pulping by treating a waste bleach liquor, which has been separated from said pulp, with a membrane and/or filter to remove the organic substances from the aqueous solution and using the filtered material to wash the cellulose subsequent to delignification with an oxygen containing gas, see column 13, lines 1-36.

Obviously the aqueous solution has been removed from the pulp after bleaching as it is a solution and not a slurry. THORSELL teaches maintaining the withdrawal of the pulping liquor at a rate sufficient to maintain the high molecular weight substances at a low concentration (see THORSELL claim 10). It would have been obvious to the artisan that maintaining a low concentration of high molecular weight substances in the recycle liquor would increase the "concentration gradient" between the wash liquor (low concentration of high molecular weight substances) and the pulp slurry (high concentration of high molecular weight substances) being washed. THORSELL further teaches adding liquor from the screening section or bleaching section and passed through the separator (7) for cleaning and using the liquor and using the liquor as diluting liquor in the pulp washing stage (column 6, lines 40-45). It would have been obvious to the routineer that the spent bleach liquor of SAMUELSON et al could be added as

dilution liquor as taught by THORSELL. Both SAMUELSON and THORSELL et al teach separating the organic material from the filtrate before using the liquor. See THORSELL et al, column 8, lines 41-63 for using membranes to separate the high molecular substances.

Claim 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over SAMUELSON as applied to claim 23 above, and further in view of DAVIES et al (5,127,992) in view of THORSELL (4,670,098).

DAVIES et al teaches adding liquor from the screening section or bleaching section multi-stage washers and passed through filtration unit (5) before recycling the unit to the washing stage (Brown stock washers (BSDW)). It would have been obvious to the routineer that the filtered spent bleach liquor of DAVIES et al could be used as the wash liquor of SAMUELSON as SAMUELSON teaches using spent bleach liquor which the organic material has been removed. The liquor of DAVIES is the same liquor used by SAMUELSON, e.g. spent bleach liquor which has been filtered to remove organic material.

Claim 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over SAMUELSON in view of THORSELL et al as applied to claim 21 above, and further in view of ELTON (4,806,203).

It would have been obvious that the pulping process could use a displacement batch digester as such is taught by THORSELL et al, Figure 1. The use of an accumulator, e.g. collector, is well known in the art as evidenced by ELTON (8). Such accumulator is used to hold the liquor before it is added to the digester. It would have been obvious to use an accumulator to hold the liquor of THORSELL et al before it is added to the digester as taught by ELTON.

The argument that SAMUELSDON et al does not teach removal of high molecular weight organic by-products from washing liquor is not convincing as SAMUELSON et al teaches washing cellulose pulp from waste bleaching liquors and/or extraction liquors (column 13, lines) before being used to wash the pulp (column 13, lines 22-26). Although this reference is to the washing after oxygen bleaching, SAMUELSON et al also teaches that this waste bleach liquor can also be used to wash the pulp in the washing stage between the digestion and the bleaching apparatus (COLUMN 4, LINES 50-57 AND column 5, lines 1-7). It would have been obvious to remove the high molecular weight organic by-products from the waste bleach liquor whether it is being used to wash pulp after bleaching or after digestion. This would have been especially obvious as the removal of high molecular weight organic by-products after digestion and before bleaching is taught by Figure 2 of THORSELL, e.g. filter (38) in wash zone (36).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

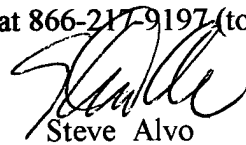
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo
Primary Examiner
Art Unit 1731

msa